

# Report and Certificate of Calibration

by  
Cal-Cert

6709 S.E. Lake Road Milwaukie, OR 97222 (800)356-4662 Fax (503)654-9670



ACCREDITED  
Laboratory Code: CL-103

**Report #:** 36293-W-02  
**Customer Name:** Washington State Patrol Property Management  
**Customer Address:** 8623 Armstrong Road Southwest  
**City:** Olympia **State:** WA **Zip:** 98504  
**Contact:** WSP Facilities  
**Service Address:** 25810 115th Street Court East Buckley, WA 98321

## Calibration Standards

16-60KC/00289 Load cell s/n 117123A/GBC-0804092 Cal date: 3/25/10 Due: 3/25/11 Range: 886 Lbs-60K Vendor: CC NIST#: 34141-C-02

16-RH/00455 Comark Thermohygrometer SN 06216410110 Cal Date 9/7/10 Cal Due 9/7/11 Vendor CC NIST# 35885-C-01

## Instrument Data

<b>Calibration Date:</b>	October 21, 2010	<b>Method Used:</b>	ASTM E-4
<b>Recommended Due Date:</b>	October 21, 2012	<b>Number of Ranges:</b>	One
<b>Calibration Frequency:</b>	24 Months	<b>Indicating System:</b>	Digital
<b>Manufacturer:</b>	Toledo	<b>Temperature:</b>	74 °F
<b>Type:</b>	Load Cell	<b>Humidity:</b>	55% RH
<b>Model Number:</b>	C2P1-50K	<b>Cal Factor:</b>	None
<b>Serial #:</b>	94196/91441281	<b>Customer PO#:</b>	None
<b>Capacity:</b>	50,000 lbs.	<b>Service Location:</b>	Service Address
		<b>As Found:</b>	Pass
		<b>As Left:</b>	Pass

Instrument Range: 50,000 lbs.			Range Resolution: 10 lbs.			Mode Verified: Compression			
Unit Under Test Reading	As Found	As Found Percentage Error	Verification Reading #1	Error	Percentage Error	Verification Reading # 2	Error	Percentage Error	Algebraic Difference
0	0.0	0.00%	0.0	0.0	0.00%	0.0	0.0	0.00%	0.00%
2,500	2,493.0	-0.28%	2,493.0	(7.0)	-0.28%	2,497.0	(3.0)	-0.12%	-0.16%
5,000	4,994.0	-0.12%	4,994.0	(6.0)	-0.12%	4,996.0	(4.0)	-0.08%	-0.04%
7,500	7,493.0	-0.09%	7,493.0	(7.0)	-0.09%	7,494.0	(6.0)	-0.08%	-0.01%
10,000	9,993.0	-0.07%	9,993.0	(7.0)	-0.07%	10,000.0	0.0	0.00%	-0.07%
12,500	12,502.0	0.02%	12,502.0	2.0	0.02%	12,502.0	2.0	0.02%	0.00%
15,000	15,001.0	0.00%	15,001.0	1.0	0.01%	15,004.0	4.0	0.03%	-0.02%
17,500	17,507.0	0.00%	17,507.0	7.0	0.04%	17,512.0	12.0	0.07%	-0.03%
20,000	20,014.0	0.07%	20,014.0	14.0	0.07%	20,016.0	16.0	0.08%	-0.01%
22,500	22,525.0	0.00%	22,525.0	25.0	0.11%	22,525.0	25.0	0.11%	0.00%
25,000	25,023.0	0.00%	25,023.0	23.0	0.09%	25,027.0	27.0	0.11%	-0.02%
0	0.0	0.00%	0.0	0.0	0.00%	0.0	0.0	0.00%	0.00%

Manufacturer:

Toledo

Type:

Load Cell

Serial #:

94196/9144128

**REMARKS:**

**Uncertainty:**

The UUT % uncertainty includes the uncertainty of the Calibration standards used combined with the uncertainty of the measurement process using the RSS method with a K factor of 2 for an approximate 95% level of confidence. The uncertainty for this measurement is < 0.25% of the test load applied unless otherwise stated. The calibration process meets or exceeds a ratio of 4:1.

**We sincerely thank you for your business.**

**Please call us at 1-800-356-4662 for all your calibration needs.**

**Cleaning and preventive maintenance were performed before calibration of this equipment.**

**Any software associated with this instrument was verified as part of this calibration.**

**Tested with Reference Standards Traceable to the National Institute of Standards and Technology using ASTM E-4 Follow the Force Tests Methods. The indicated due date was determined by the customer. Cal-Cert Test Method: CP-001. The Tolerance for this instrument is  $\pm 1\%$  of Applied Load.**

**Accredited by the International Accreditation Service, Inc. (IAS) under Calibration Laboratory Code CL-108.  
This Laboratory meets the requirements of ISO/IEC 17025 AND ANSI/NCSL Z540-1**

The above system (Instrument, Load Cell, Integral Software and Output Device(s), and accessories has been calibrated in accordance with ASTM E4 - Standard Practices for Force Verification of Testing machines using apparatus and standards calibrated in accordance to ASTM E74 - Standard practice for Calibration of Force-Measuring Instruments for Verifying the Load Indication of Testing Machines and which are traceable to NIST (National Institute of Standards and Technology). The information provided on this form complies with the data gathering and reporting requirements of ISO/IEC Guide 17025 and ANSI/NCSL Z540-1.

This Certificate is issued as a statement of the fact that on this date the above instrument(s) had an accuracy as indicated. It should not be construed or regarded as a Guarantee or Warranty of any kind (in favor of the client, the client's customers, or the public at large) that the instrument(s) will continue to retain the same percentage (%) of accuracy or efficiency as determined on the date when the calibration, and adjustments if required, was performed and reported by "CAL-CERT", since the calibrator has absolutely no control over the future operation, damage, maintenance, repairs, and overall condition of the instrument(s) and hereby expressly disclaims any and all liability for damage or loss sustained by all parties arising or resulting from deterioration, obsolescence, malfunction, or substandard performance of said instrument(s); which shall be deemed to be and which shall remain the sole responsibility of the machines regular custodian, owner, and/or manufacturer.

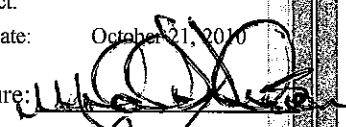
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I Certify (or declare) under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

Date: October 21, 2010

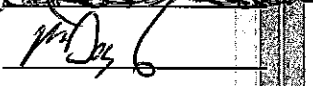
Service Engineer:

MIKE JOHNSON

Service Engineer Signature: 

Technical Manager:

MARSHALL DOYLE

Technical Manager Signature: 

Notary Public Signature: 

Date: 1-4-11

